Figure 11 graphically represents the percentage change in lymphocyte cell populations following vaccination with recombinant PAV-G-CSF.

D3

Please rewrite page 9, lines 27-28, as follows:

Figure 12 graphically represents the change in stimulation of T-cells following vaccination with recombinant PAV-G-CSF.

D4

Please rewrite page 9, line 29, as follows:

Figures 13A, 13B and 13C graphically illustrate a method of construction of a PAV E3 vector.

D5

Please rewrite the paragraph on page 16, lines 20-27 as follows:

In this experiment 5-6 week old piglets were used to represent immunocompetent pigs. A group of pigs (n=4) were vaccinated with recombinant PAV-G-CSF administered subcutaneously at a dose of 1 x 10^7 pfu per piglet A second group (n=4) were vaccinated with PAV wild type (wt) administered subcutaneously at a dose of 1 x 10^7 pfu per piglet A control group (n=4) were unvaccinated. Pigs were bled at 8 hour intervals for a period of 104 hours post vaccination. Complete blood counts were determined and the mean white blood cell (WBC) counts for each group monitored. These results are graphically represented in Figure 10.

D6

Please rewrite the paragraph bridging pages 17 and 18 as follows:

Differential WBC counts were also determined and monitored for each group. The monocyte cell populations increased rapidly in pigs following vaccination with PAV wt, but were suppressed by vaccination with the recombinant PAV-G-CSF. This effect was due to the expression of G-CSF by the recombinant. A statistical analysis of these results is tabulated in Table 4. The analysis shows that there was a significant difference between the PAV wt and PAV-G-CSF from 32 to 96 hours post-vaccination. The percentage change in mean lymphocyte populations are graphically

D7

represented in Figure 11. Figure 11 shows that there were shifts in lymphocyte cell population numbers following vaccination with the recombinant PAV-G-CSF. Unvaccinated controls show stable lymphocyte cell numbers over the duration of the experiment, whereas pigs vaccinated with PAV wt show a significant increase in lymphocyte cell population as a response to infection. Pigs vaccinated with the recombinant PAV-G-CSF show a decline in lymphocyte cell population. A statistical analysis of these results is tabulated in Table 5. The analysis shows that there was a significant difference between PAV wt and the recombinant PAV-G-CSF between 8 and 96 hours post vaccination. The different responses in lymphocyte cell proliferation following vaccination with recombinant PAV-G-CSF and PAV wt were due to the expression of G-CSF by the recombinant. These results show that vaccination with recombinant PAV-G-CSF produces a shift in sub-populations of cells involved in immunity.

Please rewrite page 19, lines 8-11, as follows:

Figure 12 graphically represents changes in the proliferation of T-cells of each group following stimulation with Concanavalin A (Con A). These results confirm that there was a significant proliferation of T-cells following vaccination with PAV wt at day 2 post vaccination, whereas vaccination with the recombinant PAV-G-CSF resulted in a suppression of T-cell proliferation by day 3.

In the Drawings:

The Notice of Draftsperson's Patent Drawing Review made objections under 37 CFR 1.84(i) for Figs 7 to 11 and under 37 CFR 1.84(p) for Figs 7 to 15. Please delete Figs. 7, 8, 9, and 10 and replace respectively with enclosed corrected Figs. 7, 8, 9, and 10. Please withdraw Fig. 11, as it is an inadvertent duplicate of Fig. 13. Please withdraw Fig. 12, as it is an inadvertent duplicate of Fig. 14. Please replace Figs. 13, 14, and 15 respectively with enclosed corrected Figs. 11, 12, and 13, renumbered to correspond with the new total number of figures.

In the Claims

Please cancel non-elected claims 3, 5-24, and 33-38 without prejudice.